

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: ZHENG et al. Examiner: Goudreau, G.
Serial No.: Unknown Group Art Unit: 1763
Filed: Docket No.: VLSI.225DIV1
Title: OPTIMIZED METAL ETCH PROCESS TO ENABLE THE USE OF
ALUMINUM PLUGS

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on February 1, 2001.

By Lynda J. Bauer
Lynda J. Bauer

PRELIMINARY AMENDMENT FILED WITH A DIVISIONAL APPLICATION

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to commencing substantive examination of the above-identified application on the merits, please enter the following Preliminary Amendment.

In The Claims

Please cancel claims 1-26 and replace them with the following new claims:

27. (New) A semiconductor device comprising:
- a first metal portion over a substrate;
 - a dielectric layer above the first metal portion;
 - a second metal portion above the dielectric layer;
 - a single-layer aluminum alloy plug extending from the first metal portion through the dielectric layer to the second metal portion, the plug having a first upper surface extending laterally beyond the second metal portion and substantially planar to an upper